

EXERCISE 1. Create a function called "CalculateData". The function must create a matrix with the notes of the students of two subjects. The function should display the data as shown in the example, including the names of the rows and columns. The function shall:

- Calculate which is the minimum and maximum grade of each subject
- Calculate which is the minimum and maximum grade of both subjects
- Calculate how many students have passed both subjects
- Ask the teacher for a grade (consider that the grade is valid); You must count how many students have obtained that grade.

	Programming	Math
Gema	8	9
Rosa	3	8
Lucia	2	6

- a) Perform the exercise with while loops
- b) Perform the exercise with for loops
- c) Perform the exercise with repeat loop

EXERCISE 2. Define a function called "StudentData" that defines a data structure that allows describing Table1. Insert the values that this table contains, name of the columns and rows, as it appears in Table1.

In the same function, insert a column with the sum of the note of Partial 1 and Partial 2 of the students. The resulting table should be like table 2.

	Partial1	Partial2
Ana	2.5	2.5
Pepe	2	2
Nacho	0.3	1.6
Bea	2.5	0.9
Gema	2.1	2.4
Alba	1.2	2.8

Table 1. Partial 1 and Partial 2

	Partial1	Partial2	Grades
Ana	2.5	2.5	5
Pepe	2	2	4
Nacho	0.3	1.6	1.9
Bea	2.5	0.9	3.4
Gema	2.1	2.4	4.5
Alba	1.2	2.8	4

Table 2. Partial 1, Partial 2 and Grades

In the same function, insert two more columns, a column with the data in which it appears if each student has delivered an extra work and in the second column the final grade must be calculated, which will be calculated: if the student has delivered the work a direct point will be added. In addition, you must insert a new student (Javier) who was not there by mistake. The final table is as it appears in Table 3

	Partial1	Partial2	Grades	Submit	Final Grade
Ana	2.5	2.5	5	YES	6
Pepe	2	2	4	YES	5
Nacho	0.3	1.6	1.9	NO	1.9
Bea	2.5	0.9	3.4	YES	4.4
Gema	2.1	2.4	4.5	YES	5.5
Alba	1.2	2.8	4	YES	5
Javier	2.3	2.1	4.4	YES	5.4

Tabla3. Partial1, Partial2, Grades, Submit and Final Grades

In the same function, calculate the number of students who have passed continuous assessment and how many have failed continuous assessment.